## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

- 1. (Currently Amended) A system for multiparameter analysis of analytes, the system comprising:
- (a) <u>insoluble microparticle</u> primary supports with a largest dimension of 500 μm or less suspended in use in a fluid solution, wherein each primary support comprises identification means for identification thereof the primary support, and at least one primary analyte is bound to each primary support;
- (b) at least one a secondary analyte suspended in use in the fluid solution; and
- (c) measuring means arranged in communication with the fluid solution for monitoring interaction between the primary analyte and secondary analyte, characterised in that:
- (d) insoluble microparticle secondary supports with a largest dimension less than or equal to the largest dimension of the primary supports are suspended in use in the fluid solution, wherein each secondary support comprises identification means for identification thereof the secondary support, and the at least one secondary analyte is bound to each of the secondary supports to suspend the at least one secondary analyte in use in the fluid solution; and
- (e) the measuring means is arranged to detect any post-reaction binding interaction between one or more primary analytes and one or more secondary analytes by detecting the identification means of the primary and secondary supports attached thereto.
- 2. (Currently Amended) <u>The A-</u> system according to Claim 1, wherein the largest dimension of the primary support is less than 300  $\mu$ m.
- 3. (Currently Amended) <u>The</u> A-system according to Claim 2, wherein the largest dimension of the primary support is less than 150μm.

- 4. (Currently Amended) <u>The A-system according to Claim 3, wherein the largest dimension of the primary support is less than 50 μm.</u>
- 5. (Currently Amended) <u>The A</u> system according to Claim 1, wherein the largest dimension of the secondary support is less than that of the primary support.
- 6. (Currently Amended) <u>The A- system according to Claim 5, wherein the largest dimension of the secondary support is less than 100 μm.</u>
- 7. (Currently Amended) The A- system according to Claim 6, wherein the largest dimension of the secondary support is less than 50µm.
- 8. (Currently Amended) The A- system according to Claim 7, wherein the largest dimension of the secondary support is less than 10  $\mu$ m.
- 9. (Currently Amended) <u>The A- system according to Claim 1, wherein at least one of the identification means comprises one or more distinguishing geometrical features, such as shape, size, barcode or dotcode, enabling identification of each support.</u>
- 10. (Currently Amended) <u>The A- system according to Claim 1, wherein at least one of the identification means is a radio frequency identification transponder (RFID).</u>
- 11. (Currently Amended) <u>The A- system according to Claim 1, wherein at least one of the identification means is an optical identification, such as fluorescence or colour based.</u>
- 12. (Currently Amended) <u>The A- system according to Claim 1, wherein the primary or secondary supports are present on only a portion of the surface of only partially covered in their respective primary or secondary analyte.</u>

- 13. (Currently Amended) <u>The A- system according to Claim 1, wherein the fluid solution is a liquid.</u>
- 14. (Currently Amended) <u>The A- system according to Claim 13</u>, wherein the liquid suspension is <u>accommodated\_placed</u> on a solid substrate, which substrate <u>includes comprises</u> a main surface extending substantially in a two dimensional plane and has tertiary analytes fixedly arranged thereon for positional identification, <u>the tertiary</u> analytes being capable of interacting with and the at least one primary analyte.
- 15. (Currently Amended) A method of multiparameter analysis of analytes, the method including comprising the steps of:
- (a) providing at least one <u>insoluble microparticle</u> primary support with a largest dimension of 500 μm or less and with identification means for identification thereof the primary support;
- (b) binding at least one primary analyte to each primary support;
- (c) suspending the primary support with its primary analyte and at least one a secondary analyte in a fluid solution; and
- (d) providing measuring means in communication with the fluid solution for monitoring interaction between the primary analyte and the secondary analyte,
  - characterised in that the method further comprises the steps of:
- (e) providing <u>insoluble microparticle</u> secondary supports with a largest dimension less than or equal to the largest dimension of the primary supports and with identification means for identification thereof the secondary support;
- (f) binding the at least one secondary analyte to each of the secondary supports,
- (g) suspending the secondary supports in use in the fluid solution to suspend the at least one secondary analyte in the fluid solution, and
- (h) arranging for the measuring means to detect any post reaction binding
  interaction between one or more primary analytes and one or more secondary

analytes by detecting the identification means of the primary and secondary supports attached thereto.

- 16. (Cancelled).
- 17. (Cancelled).
- 18. (New) The system according to Claim 9, wherein the one or more distinguishing geometrical features are selected from the group consisting of shape, size, barcode and dotcode,
- 19. (New) The system according to Claim 11, wherein the optical identification is fluorescence or colour based.